

IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

**PATENT APPLICATION**

Appellant: **McCoskey, et al.** Case: **SEDN/5311**  
Serial No.: **09/920,723** Group Art Unit: **2623**  
Filed: **August 3, 2001** Examiner: **Saltarelli, Domenic D.**  
Title: **VIDEO AND DIGITAL MULTIMEDIA AGGREGATOR**  
Confirmation #: **5093**

MAIL STOP APPEAL BRIEF-PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

**APPEAL BRIEF**

Appellant submits this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2623 dated June 30, 2006 finally rejecting claims 1-19 and 23-53.

In the event that an extension of time is required for this appeal brief to be considered timely, and a petition therefor does not otherwise accompany this appeal brief, any necessary extension of time is hereby petitioned for.

The Commissioner is authorized to charge the Appeal Brief fee (\$500) and any other fees due to make this filing timely and complete (including extension of time fees) to Deposit Account No. 20-0782/SEDN/5311.

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**Real Party in Interest**

The real party in interest is SEDNA PATENT SERVICES, LLC.

### **Related Appeals and Interferences**

Appellant asserts that no appeals or interferences are known to Appellant, Appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **Status of Claims**

Claims 1-19 and 23-53 are pending in the application. Claims 1-53 were originally presented in the application. Claims 20-22 were canceled without prejudice. Claims 1-19 and 23-53 stand finally rejected as discussed below. The final rejection of claims 1-19 and 23-53 is appealed.

**Status of Amendments**

All claim amendments have been entered and no amendments were made subsequent to final rejection.

### **Summary of Claimed Subject Matter**

Embodiments of the present invention generally are directed to a method and system for searching, packaging and delivering content using an aggregator. The aggregator of the present invention processes requests, searches, provides search results and acquires content. The aggregator may comprise, for example, a request and results processing server, a search engine server and a content acquisition server coupled to the request and results processing server. The search engine server may comprise, for example, a search engine processor, a remote content crawler coupled to the search engine processor, a search results processor coupled to the search engine processor and a replicated content database. Notably, the remote content crawler periodically crawls the communication network automatically and retrieves programming information for programs not indexed on the aggregator.

For the convenience of the Board of Patent Appeals and Interferences, Appellant's independent claims 1, 33 and 50 are presented below in claim format with elements read on the various figures of the drawings and appropriate citations to at least one portion of the specification for each element of the appealed claims.

Claim 1 positively recites (with reference numerals, where applicable and cites to at least one portion of the specification added):

1. A system (200) for finding and retrieving programming from remote sources (204) in a distributed digital communication network, comprising:
  - an aggregator (201), comprising:
    - a request and results processing server (300),
    - a search engine server (350) coupled to the request and results processing server (300), wherein the search engine server (350), comprises:
      - a search engine processor (351);
      - a remote content crawler (356) coupled to the search engine processor (351), wherein the remote content crawler (356)

periodically crawls the communications network automatically and retrieves programming information for programs not indexed on the aggregator (201);

a search results processor (355) coupled to the search engine processor (351); and

a replicated content database (357); and

a content acquisition server (400) coupled to the request and results processing server (300), wherein the request and results processing server (300) receives a request for a program, the search engine server (350) searches the remote sources (204) for the program, and the content acquisition server (400) receives the program from one of the remote sources (204).

Claim 33 positively recites (with reference numerals, where applicable and cites to at least one portion of the specification added):

33. A method using a video and multimedia aggregator (201) for finding and retrieving program content from remote sources (204) in a distributed digital communication network, comprising:

receiving (651) a program content search request from a user terminal (202) in the network (p. 25, ll. 25-26.);

searching a local content database based on the program content search request (p. 28, ll. 23-29.);

searching one or more remote content databases based on the program content search request (p. 33, ll. 16-19.);

identifying (712) one or more programs based on the searches (p. 32, ll. 2-3.);

acquiring (760) one or more of the one or more identified programs from one or more of the local content database and the remote databases (p. 33, ll. 16-19.);



periodically crawling the communications network automatically (p. 4, ll. 1-2; p. 29, ll. 14-20); and

retrieving programming information for programs not indexed on the aggregator (Appellants' specification, p. 29, ll. 14-20).

Claim 50 positively recites (with reference numerals, where applicable and cites to at least one portion of the specification added):

50. A video and multimedia aggregator for use in a distributed digital communication network, comprising:

means for requesting a search for program content (202) (p. 7, l. 30 – p. 8, l. 10.);

means for processing the search request (300) (p. 11, ll. 17-20.);

means for searching local and remote sources for the program content (350) (p. 14, ll. 18-21.);

means for acquiring metadata related to the program content (309) (p. 14, ll. 8-13.);

means for displaying the acquired metadata (202) (p. 7, l. 30 – p. 8, l. 10.)

means for receiving a program content download request (250) (p. 9, ll. 4-11.);

means for acquiring the program content in the download request (201) (p. 6, ll. 11-13.);

means for displaying the acquired program content at a user terminal (202) (p. 7, l. 30 – p. 8, l. 10.);

means for billing a user of the user terminal (506) (p. 19, ll. 3-5.); and

means for periodically crawling the communications network (309) automatically, thereby retrieving programming information for programs not indexed on the aggregator (p. 4, ll. 1-2; p. 14, ll. 23-28.).

**Grounds of Rejection to be Reviewed on Appeal**

Claims 1-10, 14-19 and 23-32 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,600,573 issued to Hendricks, et al. (hereinafter "Hendricks") in view of U.S. Patent 5,956,716 issued to Kenner (hereinafter "Kenner") and U.S. Patent Publication 2002/0038308 published to Cappi (hereinafter "Cappi").

Claims 11-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hendricks, Kenner and Cappi and further in view of U.S. Patent 6,772,150 issued to Whiteman, et al. (hereinafter "Whitman") and U.S. Patent 6,839,705 issued to Grooters (hereinafter "Grooters").

Claims 33, 39-42, 46, 47, 50, 51 and 53 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner in view of Cappi.

Claims 34-36 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Whitman.

Claims 37 and 38 are rejected under 35 U.S.C. §103 as being unpatentable over Kenner, Cappi and Whitman in further view of U.S. Patent 6,243,713 issued to Nelson, et al. (hereinafter "Nelson").

Claims 43 and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Brin, et al. "The Anatomy of a Large-Scale Hypertextual Web Search Engine," supplied by appellant on August 3, 2001 (hereinafter "Brin").

Claim 45 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner, Cappi and Brin and in further view of Grooters.

Claim 48 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi and in further view of Grooters.

Claims 49 and 52 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi and in further view of Nelson.

## **ARGUMENTS**

### **I. THE EXAMINER ERRED IN REJECTING CLAIMS 1-19 AND 23-53 UNDER 35 U.S.C. §103(A) BECAUSE THE CITED REFERENCES FAIL TO TEACH OR SUGGEST PERIODICALLY CRAWLING A COMMUNICATIONS NETWORK AUTOMATICALLY TO RETRIEVE PROGRAMMING INFORMATION FOR PROGRAMS NOT INDEXED ON AN AGGREGATOR.**

#### **A. 35 U.S.C. §103(a) - Claims 1-10, 14-19, and 23-32**

Claims 1-10, 14-19 and 23-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hendricks in view of Kenner and Cappi. Appeal of this rejection is requested.

In addition to the arguments contained herein, the appeals board is respectfully directed to the prior office action responses.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. The Hendricks, Kenner and Cappi references, alone or in combination, fail to teach or suggest Appellants' invention as a whole. Specifically, the combination of Hendricks, Kenner and Cappi fail to teach or to suggest at least Appellants' claimed aggregator comprising at least a search engine server comprising a remote content crawler coupled to a search engine processor, wherein the remote content crawler periodically crawls a communications network automatically and retrieves programming information for programs not indexed on the aggregator.

The Hendricks reference discloses an operations center including a system controller, a holder, a computer assisted packaging system that receives video on demand requests and determines whether the program is available for distribution and whether a link is available, and a receiver connected to the holder for receiving signals from a satellite or another remote source. (See Hendricks, Abstract.) The Hendricks reference fails to teach or suggest at least

Appellants' claimed aggregator, comprising at least a search engine server comprising a remote content crawler coupled to a search engine processor, wherein the remote content crawler periodically crawls a communications network automatically and retrieves programming information for programs not indexed on the aggregator.

The Kenner and Cappi references fail to bridge the substantial gap between the Hendricks reference and Appellants' claimed invention. In particular, the Kenner reference discloses using a primary index manager (PIM) to process user requests for video clips stored locally or remotely via a local search and retrieval unit (SRU). (See Kenner, Abstract.) Nowhere in the Kenner reference is there any teaching or suggestion of Appellants' claimed aggregator, comprising at least a search engine server comprising a remote content crawler coupled to a search engine processor, wherein the remote content crawler periodically crawls a communications network automatically and retrieves programming information for programs not indexed on the aggregator.

Cappi does not teach or suggest what is missing from Hendricks and Kenner as described above. The Examiner alleges that Cappi teaches an "automated system". The Appellants respectfully submit that the Examiner has mischaracterized Cappi. In fact, Cappi teaches directly contrary to the Examiner's assertion.

The alleged citation to Cappi by the Examiner of an "automated system" is misplaced because that reference only refers to content integration (i.e. combining various databases into one platform) and not to the data retrieval. Even if this portion is interpreted broadly, the Examiner mis-characterizes the integration as "automated" because Cappi specifically teaches that the system "eventually will semi-automatically perform all of the steps of integration . . . it is initially necessary for the descriptions of data elements to be manually expanded, edited and entered by a user of the system." (See Cappi, para. [0087], emphasis added.)

Moreover, Cappi only teaches retrieving data in response to a user query or request. (See Cappi, para. [0041].) In contrast, the Appellants' invention

teaches that the remote content crawler periodically crawls a communication network automatically and retrieves programming information for programs not indexed on the aggregator. Therefore, the data retrieval system is not a remote content crawler that retrieves programming information as taught by the Appellants' invention.

Consequently, Cappi clearly fails to teach, show or suggest the Appellants' claimed aggregator, comprising at least a search engine server comprising a remote content crawler coupled to a search engine processor, wherein the remote content crawler periodically crawls a communications network automatically and retrieves programming information for programs not indexed on the aggregator. Accordingly, any attempted combination of the Hendricks and Kenner references with any other additional references, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim.

Moreover, the Examiner uses Official Notice alleging that it is notoriously well known in the art to periodically crawl communications networks with content crawlers. (See Final Office Action dated June 30, 2006, p. 8, ll. 5-7.) The Appellants respectfully submit that Official Notice was not properly established and, thus, the combination of Hendricks, Kenner and Cappi also fail to teach or to suggest periodically crawling.

Under MPEP 2144.03, the board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies. In re Lee, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002). Moreover, there must be some form of evidence in the record to support an assertion of common knowledge. See *Id.* The Examiner's self proclaimed "notoriousness" of various technologies is clearly "conclusory" without supporting evidence and, therefore fails to properly establish Official Notice.

Even if properly established the Appellants adequately traversed the Official Notices, as required under MPEP 2144.03. The Examiner failed to read completely the Appellants traversal to the Official Notices and mischaracterized

the Applicants' arguments as simply stating that the use of Official Notices "may not be well known".

Read completely, the Appellants' argument stated "it may not be well known to combine the allegedly well known apparatuses and/or methods with other apparatuses and/or methods recited in the respective claims or in other claims from which the respective claims may depend." (See Response dated May 18, 2006, pp. 22-23, emphasis added.) Similar to *Lee* where the court held that the board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, here, the Examiner may not rely on conclusory statements when dealing with the combination of allegedly well known apparatuses and/or methods.

Consequently, the Examiner failed to establish a proper Official Notice. Even if the Examiner feels that proper Official Notice was established, the Appellants adequately traversed such a finding by specifically pointing out the supposed errors in the Examiner's action in the previous Response dated May 18, 2006, as required under MPEP 2144.03. As a result, the Examiner is required to support his or her finding with adequate evidence as requested by the Appellants for the Examiner to provide references showing these features in the Appellants' Response dated May 18, 2006. Alternatively, the Examiner is required by 37 CFR 1.104(d)(2), to support the finding of what is known in the art by providing an affidavit or declaration setting forth specific factual statements and explanation to support the finding.

Thus, Hendricks, Kenner and Cappi, alone or in combination, fail to disclose the invention as a whole. As such, Appellants submit that independent claim 1 is not obvious and fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder. Furthermore, claims 2-10, 14-19, and 23-32 depend directly or indirectly from independent claim 1 and recite additional limitations thereof. As such, and for at least the same reasons as discussed above, Appellants submit that these dependent claims are also not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

B. 35 U.S.C. §103(a) - Claims 11-13

Claims 11-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hendricks, Kenner and Cappi in further view of Whitman and Grooters. Appeal of this rejection is requested.

Claims 11-13 depend directly or indirectly from independent claim 1 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Hendricks, Kenner and Cappi references fail to teach or suggest Appellants' invention as a whole, as recited in claim 1. Whitman and Grooters also do not teach or suggest at least "a remote content crawler coupled to the search engine processor, wherein the remote content crawler periodically crawls the communications network automatically and retrieves programming information for programs not indexed on the aggregator." Accordingly, any attempted combination of the Hendricks, Kenner and Cappi references with the Whitman and Grooters references, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim because they all lack the feature of periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator. As such, Appellants submit that dependent claims 11-13 are also not obvious and are patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

C. 35 U.S.C. §103(a) - Claims 33, 39-42, 46, 47, 50, 51 and 53

Claims 33, 39-42, 46, 47, 50, 51 and 53 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner in view of Cappi. Appeal of this rejection is requested.

In addition to the arguments contained herein, the appeals board is respectfully directed to the prior office action responses.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. The Kenner and Cappi references, alone or in combination, fail to teach or suggest Appellants' invention as a whole. Specifically, the combination of Kenner and Cappi fail to teach or to suggest at least Appellants' claimed method of "periodically crawling the communications network automatically; and retrieving programming information for programs not indexed on the aggregator" as explicitly claimed in claim 33. Moreover, Kenner and Cappi do not teach or suggest at least Appellants' claimed aggregator comprising, "means for periodically crawling the communications network automatically, thereby retrieving programming information for programs not indexed on the aggregator" as explicitly claimed in claim 50.

As discussed above, the Kenner reference discloses using a primary index manager (PIM) to process user requests for video clips stored locally or remotely via a local search and retrieval unit (SRU). (See Kenner, Abstract.) Nowhere in the Kenner reference is there any teaching or suggestion of Appellants' claimed method of "periodically crawling the communications network automatically; and retrieving programming information for programs not indexed on the aggregator" as explicitly claimed in claim 33. Moreover, the Kenner reference does not teach or suggest at least Appellants' claimed aggregator comprising, "means for periodically crawling the communications network automatically, thereby retrieving programming information for programs not indexed on the aggregator" as explicitly claimed in claim 50.

Cappi fails to bridge the substantial gap left by Kenner as described above. The Examiner alleges that Cappi teaches an "automated system". The Appellants respectfully submit that the Examiner has mischaracterized Cappi. In fact, Cappi teaches directly contrary to the Examiner's assertion.



The alleged citation to Cappi by the Examiner of an “automated system” is misplaced because that reference only refers to content integration (i.e. combining various databases into one platform) and not to the data retrieval. Even if this portion is interpreted broadly, the Examiner mis-characterizes the integration as “automated” because Cappi specifically teaches that the system “eventually will semi-automatically perform all of the steps of integration . . . it is initially necessary for the descriptions of data elements to be manually expanded, edited and entered by a user of the system.” (See Cappi, para. [0087], emphasis added.)

Moreover, Cappi only teaches retrieving data in response to a user query or request. (See Cappi, para. [0041].) In contrast, the Appellants’ invention teaches that the remote content crawler periodically crawls a communication network automatically and retrieves programming information for programs not indexed on the aggregator. Therefore, the data retrieval system is not a remote content crawler that retrieves programming information as taught by the Appellants’ invention.

Consequently, Cappi clearly fails to teach, show or suggest the Appellants’ claimed aggregator, comprising at least a search engine server comprising a remote content crawler coupled to a search engine processor, wherein the remote content crawler periodically crawls a communications network automatically and retrieves programming information for programs not indexed on the aggregator. Accordingly, any attempted combination of the Hendricks and Kenner references with any other additional references, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim.

Moreover, the Examiner uses Official Notice alleging that it is notoriously well known in the art to periodically crawl communications networks with content crawlers. (See Final Office Action dated June 30, 2006, p. 24, ll. 17-19.) The Appellants respectfully submit that Official Notice was not properly established and, thus, the combination of Kenner and Cappi also fails to teach or to suggest periodically crawling.

Under MPEP 2144.03, the board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies. In re Lee, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002). Moreover, there must be some form of evidence in the record to support an assertion of common knowledge. See *Id.* The Examiner's self proclaimed "notoriousness" of various technologies is clearly "conclusory" without supporting evidence and, therefore fails to properly establish Official Notice.

Even if properly established the Appellants adequately traversed the Official Notices, as required under MPEP 2144.03. The Examiner failed to read completely the Appellants traversal to the Official Notices and mischaracterized the Applicants' arguments as simply stating that the use of Official Notices "may not be well known".

Read completely, the Appellants' argument stated "it may not be well known to combine the allegedly well known apparatuses and/or methods with other apparatuses and/or methods recited in the respective claims or in other claims from which the respective claims may depend." (See Response dated May 18, 2006, pp. 22-23, emphasis added.) Similar to *Lee* where the court held that the board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, here, the Examiner may not rely on conclusory statements when dealing with the combination of allegedly well known apparatuses and/or methods.

Consequently, the Examiner failed to establish a proper Official Notice. Even if the Examiner feels that proper Official Notice was established, the Appellants adequately traversed such a finding by specifically pointing out the supposed errors in the Examiner's action in the previous Response dated May 18, 2006, as required under MPEP 2144.03. As a result, the Examiner is required to support his or her finding with adequate evidence as requested by the Appellants for the Examiner to provide references showing these features in the Appellants' Response dated May 18, 2006. Alternatively, the Examiner is required by 37 CFR 1.104(d)(2), to support the finding of what is known in the art

by providing an affidavit or declaration setting forth specific factual statements and explanation to support the finding.

As such, Appellants submit that independent claims 33 and 50 satisfy the requirements of 35 U.S.C. §103 and are patentable Kenner in view of Cappi. Furthermore, claims 39-42, 46, 47, 51, and 53 depend directly or indirectly from independent claims 33 and 50 and recite additional limitations thereof. Accordingly, for at least the same reasons as discussed above, Appellants submit that these dependent claim fully satisfy the requirements of 35 U.S.C. §103 and are patentable over Kenner in view of Cappi.

D. 35 U.S.C. §103(a) - Claims 34-36

Claims 34-36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Whitman. Appeal of this rejection is requested.

Claims 34-36 depend directly or indirectly from independent claim 33 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Kenner and Cappi references fail to teach or suggest Appellants' invention as a whole, as recited in claim 33. Whitman also does not teach or suggest at least "a remote content crawler coupled to the search engine processor, wherein the remote content crawler periodically crawls the communications network automatically and retrieves programming information for programs not indexed on the aggregator." Accordingly, any attempted combination of the Kenner and Cappi references with the Whitman reference, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim because Whitman lacks the feature of periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator. As such, Appellants submit that dependent claims 34-36 are also not obvious and are patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

E. 35 U.S.C. §103(a) - Claims 37 and 38

Claims 37 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner, Cappi and Whitman in further view of Nelson. Appeal of this rejection is requested.

Claims 37 and 38 depend indirectly from independent claim 33 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Kenner, Cappi and Whitman references fail to teach or suggest Appellants' invention as a whole, as recited in claim 33. Nelson does not teach or suggest the gap between Kenner and Whitman as stated above. Accordingly, any attempted combination of the Kenner, Cappi and Whitman references with Nelson, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim. As such, Appellants submit that dependent claims 37 and 38 are also not obvious and are patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

F. 35 U.S.C. §103(a) – Claims 43 and 44

Claims 43 and 44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Brin. Appeal of this rejection is requested.

Claims 43 and 44 depend directly or indirectly from independent claim 33 and recite additional limitations thereof. Moreover, for at least the reasons discussed above, the Kenner and Cappi references fails to teach or suggest Appellants' invention as a whole, as recited in claim 33. Brin does not teach or suggest the limitations of claim 33 such as periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator.

Accordingly, any attempted combination of the Kenner and Cappi references with Brin, in a rejection against the dependent claims, would still result

in a gap in the combined teachings in regards to the independent claim. As such, Appellants submit that dependent claims 43 and 44 are also not obvious and is patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

G. 35 U.S.C. §103(a) – Claim 45

Claim 45 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner, Cappi and Brin in further view of Grooters. Appeal of this rejection is requested.

Claim 45 depends indirectly from independent claim 33 and recites additional limitations thereof. Moreover, for at least the reasons discussed above, the Kenner, Cappi and Brin references fail to teach or suggest Appellants' invention as a whole, as recited in claim 33. Grooters also does not teach or suggest the limitations such as periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator.

Accordingly, any attempted combination of the Kenner, Cappi and Brin references with Grooters, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim. As such, Appellants submit that dependent claim 45 is also not obvious and is patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

H. 35 U.S.C. §103(a) – Claim 48

Claim 48 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Grooters. Appeal of this rejection is requested.

Claim 48 depends indirectly from independent claim 33 and recites additional limitations thereof. Moreover, for at least the reasons discussed

above, the Kenner and Cappi references fail to teach or suggest Appellants' invention as a whole, as recited in claim 33. Grooters also does not teach or suggest the limitations such as periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator.

Accordingly, any attempted combination of the Kenner and Cappi references with Grooters reference, in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim. As such, Appellants submit that dependent claim 48 is also not obvious and is patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that this rejection under 35 U.S.C. §103(a) be withdrawn.

I. 35 U.S.C. §103(a) – Claims 49 and 52

Claims 49 and 52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kenner and Cappi in further view of Nelson. Appeal of this rejection is requested.

As stated above, Kenner and Cappi do not teach or suggest periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator.

Nelson discloses multimedia document retrieval by retrieving multimedia queries of different data types. Nelson also does not teach or suggest periodically crawling the communications network automatically and retrieving programming information for programs not indexed on the aggregator. As such, Appellants submit that dependent claims 49 and 52 are also not obvious and are patentable under 35 U.S.C. §103.

Therefore, Appellants respectfully request that the rejection of such claims under 35 U.S.C. §103(a) be withdrawn.

**CONCLUSION**

Thus, Appellant submits that none of the claims presently in the application are allowable under the provisions of 35 U.S.C. §103.

For the reasons advanced above, Appellant respectfully urges that the rejections of claims 1-19 and 23-53 are improper. Reversal of the rejections of the Final Office Action is respectfully requested.

Respectfully submitted,

11/27/06  
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## CLAIMS APPENDIX

1. (previously presented) A system for finding and retrieving programming from remote sources in a distributed digital communication network, comprising:
  - an aggregator, comprising:
    - a request and results processing server,
    - a search engine server coupled to the request and results processing server, wherein the search engine server, comprises:
      - a search engine processor;
      - a remote content crawler coupled to the search engine processor, wherein the remote content crawler periodically crawls the communications network automatically and retrieves programming information for programs not indexed on the aggregator;
      - a search results processor coupled to the search engine processor; and
      - a replicated content database; and
      - a content acquisition server coupled to the request and results processing server, wherein the request and results processing server receives a request for a program, the search engine server searches the remote sources for the program, and the content acquisition server receives the program from one of the remote sources.
2. (original) The system of claim 1, wherein the aggregator further comprises:
  - a decoder and content formatter including a decoder processor that decodes the programming for storage; and
  - a coder and content formatter including a coder processor that formats the programming for delivery to a user terminal.



3. (original) The system of claim 1, wherein the aggregator further comprises a local content storage that stores one or more programs, and wherein the search engine server first searches the local content storage before searching the remote sources.

4. (original) The system of claim 1, wherein the aggregator further comprises:

- a communications server coupled to the request and results processing server, wherein the communications server communicates with one or more user terminals in the digital communication network; and

- a content delivery server coupled to the communications server, wherein the content delivery server receives the program from the content acquisition server and provides the program to one or more of the one or more user terminals.

5. (original) The system of claim 1, wherein the aggregator further comprises a network gateway that couples the search engine server and the content acquisition server to the one or more remote sources.

6. (original) The system of claim 1, wherein the request and results processing server, comprises:

- a request receiver and router;

- a content download request processor coupled to the request receiver and router;

- a search request processor coupled to the request receiver and router;

- a content search suggestion engine coupled to the search request processor;

- a search results form builder; and

- a scheduled program prompt and notification processor.

7. (original) The system of claim 6, wherein the content search suggestion engine, comprises:
  - a suggestion database processor;
  - a content metadata crawler;
  - a suggestion keyword indexer; and
  - a suggestion database.
8. (original) The system of claim 7, wherein the suggestion database comprises one or more indexed suggestion keywords relating a metadata element with a program content type.
9. (original) The system of claim 8, wherein the content metadata crawler generates a list of available content metadata, and passes the list to the suggestion keyword indexer.
10. (original) The system of claim 9, wherein the suggestion keyword indexer indexes each metadata element, assigns each metadata element an associated vector quantity, the vector quantity describing the metadata element as a suggestion keyword, and populates the suggestion database with the indexed suggestion keywords, wherein an index value indicates a proximity of metadata elements within the suggestion database.
11. (original) The system of claim 10, wherein the suggestion database processor comprises a search engine that searches the suggestion database with user-supplied search criteria and user historical and demographic data to produce a suggested search terms list, wherein search terms in the suggested search terms list are used to create an augmented search request form, and wherein the augmented search request form is provided to the search request processor.

12. (original) The system of claim 11, wherein the suggestion database processor prompts the content metadata crawler to search content metadata in the aggregator local database, and wherein the metadata crawler searches content metadata in the aggregator local database and passes retrieved content metadata to the suggestion keyword indexer as the list of available content metadata.

13. (original) The system of claim 12, wherein the suggestion database processor uses the proximity of the metadata elements to determine a vector relevance of suggestion keywords to search keywords.

14. (original) The system of claim 6, wherein the search results form builder receives user search results and suggested search results, and produces a search results form, the search results form comprising programming, scheduling and availability information, and wherein the results form builder provides the search results form to a user terminal.

15. (original) The system of claim 14, wherein the search results form further comprises content metadata and identification information.

16. (original) The system of claim 6, wherein the request receiver and router, in response to a user request, opens a dialog with a database administrator, retrieves the requesting user's administrative data, and routes the administrative data to the user's terminal.

17. (original) The system of claim 6, wherein the content download request processor receives content download requests, authorizes the download requests, and sends the download requests to a content acquisition server.

18. (original) The system of claim 6, wherein the search request processor, comprises:

search request processing programs, comprising:

- a search term suggestion program, and
- a search term comparison program.

19. (original) The system of claim 6, wherein the scheduled program prompt and notification processor provides a content notification to the user, wherein the content notification comprises one or more of an on-screen pop-up window, audible notification, e-mail notification, and automated telephone notification, and wherein the content notification includes an indication of program availability.

20-22. (canceled)

23. (previously presented) The system of claim 1, wherein the specific program request is provided by the user using a search request form.

24. (original) The system of claim 23, wherein the search request form comprises:

- a user identification and authorization information;
- a user administration and billing information;
- a search request qualification;
- a search request criteria; and
- a content type.

25. (original) The system of claim 24, wherein the user identification and authorization information, comprises:

- a current user identification;
- a user network address;
- a public encryption key;
- digital rights management parameters;
- a preferred content format; and

a current hardware configuration, wherein the current hardware configuration is provided to a coder and content formatter that formats the search request form for delivery to a user terminal.

26. (original) The system of claim 24, wherein the search request qualification, comprises:

- search request initiation time;
- a list of search request content types; and
- a search request time limit.

27. (original) The system of claim 24, wherein the search request criteria, comprises:

- audio/video programming;
- computer software;
- electronic book; and
- Internet websites.

28. (original) The system of claim 26, wherein the list of search request content types allows the user to specify one or more of video, audio, software, text, electronic books, and Websites, wherein the search engine server returns search results based on the list of search result content types.

29. (previously presented) The system of claim 1, wherein the replicated content database comprises a copy of an aggregator local database, wherein the search engine server searches the replicated content database according to the search request form.

30. (original) The system of claim 1, wherein the content acquisition server, comprises:

- a content request processor and router; and

a remote content download processor, comprising a content buffer, wherein the remote content download processor caches programming content while managing a download connection to the remote content sources over the digital communications network.

31. (original) The system of claim 1, further comprising:

a content delivery server, comprising:

a local content request processor,

a digital rights management processor,

an advertisement processor,

a content delivery processor, and

an encryption processor.

32. (original) The system of claim 1, further comprising:

a system administrator, comprising:

a system administrative server,

a user registration server,

a content fee and copyright billing server,

a user billing server,

a content provider registration server, and

a database administrator.

33. (previously presented) A method using a video and multimedia aggregator for finding and retrieving program content from remote sources in a distributed digital communication network, comprising:

receiving a program content search request from a user terminal in the network;

searching a local content database based on the program content search request;

searching one or more remote content databases based on the program content search request;

- identifying one or more programs based on the searches;
- acquiring one or more of the one or more identified programs from one or more of the local content database and the remote databases;
- periodically crawling the communications network automatically; and
- retrieving programming information for programs not indexed on the aggregator.

34. (original) The method of claim 33, wherein the step of receiving the program content search request, comprises:

- receiving search criteria from the user terminal;
- processing the received search criteria into a search request form; and
- logging the search criteria into a user local database

35. (original) The method of claim 34, wherein the search request form, comprises:

- a user identification and authorization information;
- a user administration and billing information;
- a search request criteria; and
- a program content type.

36. (original) The method of claim 35, wherein the user identification and authorization information comprises:

- a current user identification;
- an authorization code and password;
- a user network address;
- a public encryption key;
- digital rights management parameter;
- a preferred content format; and
- a current hardware configuration, wherein the current hardware configuration is provided to a coder and content formatter that formats the search request form for delivery to a user terminal.

37. (original) The method of claim 35, wherein the search criteria are received as a free form question, further comprising:

- applying a search criteria algorithm to parse the free form question;
- analyzing the parsed free form question to identify and categorize significant terms; and
- entering the categorized and identified significant terms into the search request form, wherein a search request processor accesses a lexicon of terms to augment the search request.

38. (original) The method of claim 37, further comprising designating additional search parameters, wherein the additional search parameters are based on a type of query word used in the free form question.

39. (original) The method of claim 33, further comprising:

- decoding the one or more programs received from the remote databases;
- storing the decoded programs;
- encoding the stored programs and the programs from the local content database for delivery to the user terminal; and
- delivering the encoded programs to the user terminal.

40. (original) The method of claim 33, wherein the remote sources are coupled to the user terminal through a wide area distribution system, wherein program content is delivered directly to a user terminal thereby bypassing the aggregator.

41. (original) The method of claim 33, wherein the remote sources are coupled to the aggregator through a network gateway.

42. (original) The method of claim 33, further comprising:



providing a search results list, the search results list including information related to the one or more identified programs; and

receiving a program acquisition request based on the search results list.

43. (original) The method of claim 33, wherein the aggregator comprises a content metadata crawler, the method further comprising:

crawling the remote sources;

identifying program content based on one or more completed search requests; and

acquiring one or more programs based on the identified program content, wherein the acquired programs are stored in an aggregator database.

44. (previously presented) The method of claim 43, wherein the identifying program content step further comprises using user profile information.

45. (original) The method of claim 44, wherein the user profile information includes one or more of user demographic information, user program viewing history, and user-provided information.

46. (original) The method of claim 33, further comprising verifying a user is authorized to request the searches.

47. (original) The method of claim 46, wherein the user is not authorized to request the searches, further comprising notifying the user terminal that the search request is denied.

48. (original) The method of claim 46, further comprising:

filtering the search request based on the user's profile, wherein the filtering steps apply filters comprising one or more of program content type and program content provider.

49. (original) The method of claim 46, wherein the program content search request includes a free form question, further comprising:

- comparing a supplied search term in the free form question with a database of indexed suggestion keywords;
- determining a relevance of the supplied search term, comprising:
  - calculating vector differences of the supplied search term and indexed keywords, thereby creating a list of suggestion key words,
  - retrieving a user profile,
  - ranking the suggestion keywords based on the user profile,
  - appending the list of suggestion keywords to the search request form,

thereby creating an augmented search request form,

- routing the augmented search request form to a search engine server, and
- searching content metadata for occurrences of the search criteria.

50. (previously presented) A video and multimedia aggregator for use in a distributed digital communication network, comprising:

- means for requesting a search for program content;
- means for processing the search request;
- means for searching local and remote sources for the program content;
- means for acquiring metadata related to the program content;
- means for displaying the acquired metadata;
- means for receiving a program content download request;
- means for acquiring the program content in the download request;
- means for displaying the acquired program content at a user terminal;
- means for billing a user of the user terminal; and
- means for periodically crawling the communications network automatically, thereby retrieving programming information for programs not indexed on the aggregator.

51. (original) The aggregator of claim 50, wherein the means for requesting the search comprises means for receiving and routing the search request.

52. (original) The aggregator of claim 50, wherein the means for processing the search request, comprises:

- means for constructing a search request form;
- means for suggesting content to supplement the search request;
- and means to provide the search results to the user terminal.

53. (original) The aggregator of claim 50, further comprising means for providing user fees to a content provider.

## **EVIDENCE APPENDIX**

None

## **RELATED PROCEEDINGS APPENDIX**

None.